THE EUROPEAN GENUS MOROPHAGA HERRICH-SCHÄFFER IN NORTH AMERICA
(LEPIDOPTERA: TINEIDAE)

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While collecting lepidopterous larvae during the summer of 1935, in the Thatuna Hills (Moscow Mountains), a few miles northeast of Moscow, Idaho, I gathered a small quantity of the fungus *Cryptophorus volvatus* (Peck) Shear. This fungus grows rather commonly on the north sides of pine trees (*Pinus ponderosa* Dougl.) and is heavily infested with coleopterous and lepidopterous larvae.

From the lepidopterous larvae collected I secured a series of seven moths, which, when later referred to Mr. August Busck, were determined by him as probably belonging to the European genus *Morophaga* and representing a new species.

Since coming to the Bureau of Entomology and Plant Quarantine I have had an opportunity to study this material more carefully and, although I have been unable to compare it with European examples of the genus, I have little doubt that the species described below belongs to *Morophaga*.

Morophaga cryptophori, new species

(Plate 21, figs. 1-2; Plate 22, figs. 3-5)

Labial palpus grayish fuscous, scales tipped with pale gray; second segment suffused with fuscous; third segment with a spot at base and one at apex, exteriorly, blackish fuscous. Antenna fuscous, narrowly annulated with gray. Head fuscous, scales tipped with pale gray. Thorax and fore wing gray, the former strongly overlaid and the latter irrorated and streaked with blackish fuscous; from base of fore wing, along vein 1c a broken blackish-fuscous streak (obsolete in some specimens, especially in females); at the end of cell, from vein 10 to vein 3, an outwardly oblique, transverse, irregular blackish-fuscous spot; along costa, around termen to tornus a series of blackish-fuscous spots; cilia gray, suffused and irrorated with blackish fuscous. Hind wing grayish fuscous, darker toward margins; cilia pale fuscous with a fuscous subbasal band. Legs gray suffused and annulated with blackish fuscous. Abdomen gray, irrorated with blackish fuscous.

Male genitalia: Harpe broad, thick, bilobed; costal lobe moderately narrow, spoon-shaped; costa produced basally into a long, slightly twisted projection; ventral lobe thick, with an outwardly curved row of short, stout, toothlike projections beginning at basal third of ventral margin and extending almost to distal end of lobe; from base of harpe, slightly costad of middle, a prominent fleshy protuberance (probably element of transtilla) giving rise to several long, stout hairs. Anellus an elongate, folded plate (which expands broadly when the harpes are spread) articulating with the ventro-anterior edges of the harpes and attached to the ventro-posterior edge of the vinculum by a strong membrane. Aedeagus nearly straight, slender, with a fleshy, tonguelike flap at distal end. Vinculum large, very broad ventrally, narrower laterally and extending dorsally as two stout arms to the articulation with the tegumen. Tegumen short, stout, and produced ventrally into two stout, curved processes. Uncus fleshy, divided.

Female genitalia: Genital plate heavily sclerotized; posterior edge produced as a thick, ribbed, spoon-shaped process. Ostium slightly produced, round, edged laterally with small, curved, sclerotized processes. Ductus bursae sclerotized for about half its length; inception of ductus seminalis on dorsal surface of ductus bursae, slightly anterior to ostium. Bursa copulatrix round, without signum.

Alar expanse 20-27 mm.

Type: U. S. National Museum No. 53775.

Type locality: Thatuna Hills, Latah County, Idaho.

Food plant: *Cryptophorus volvatus* (Peck) Shear.

Remarks: Described from the male type and one male and five female paratypes, all from the same locality. Paratypes in the U. S. National and Canadian National collections.

The moths emerged from July 23 to July 25, 1935.

This species closely resembles the European *morella*, the larva of which feeds in a fungus growth of mulberry. The North American species differs, however, in the more elongate dark markings of the fore wing and the absence of dark spots on the inner margin.

The venation of this species is variable, as will be seen in figures 3-3b, the venation often varying on opposite sides of a specimen.

When the larva has finished feeding, it constructs a tough silk tube to the exterior of the fungus growth. The pupa is extruded at the time of emergence of the moth.

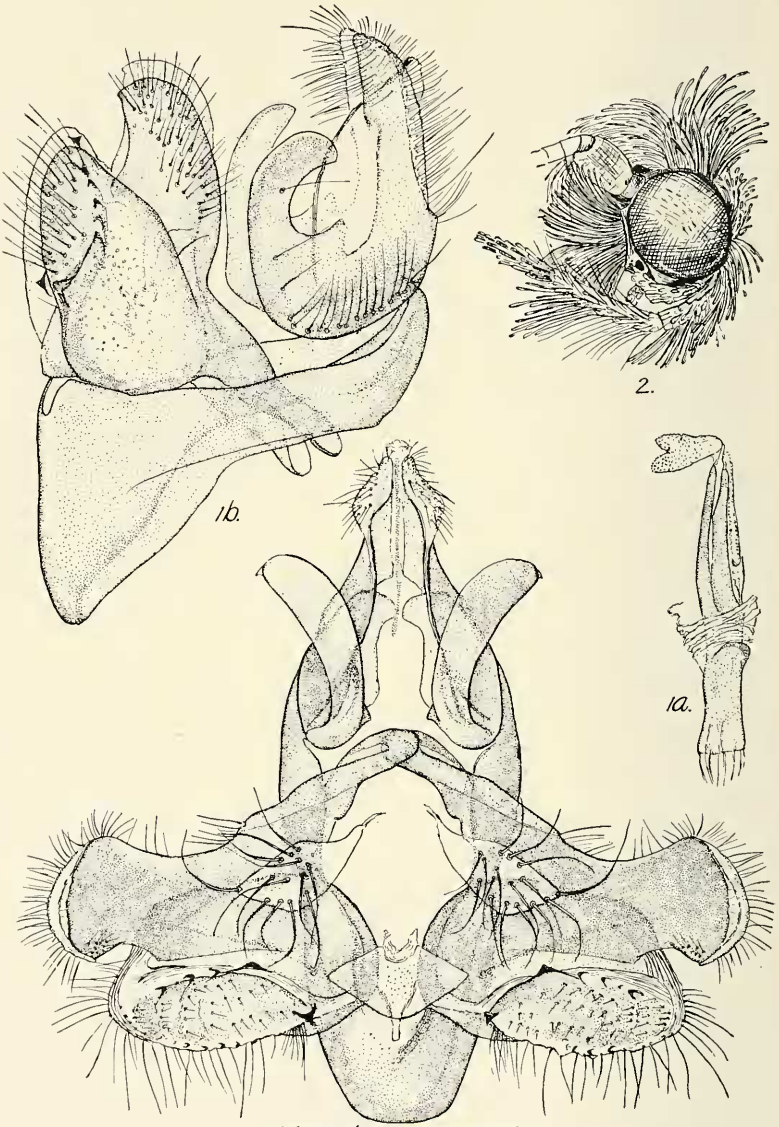

PLATE 21

Morophaga cryptophori

1-1b. Male genitalia: 1, Ventral view of male genitalia with aedeagus removed; 1a, aedeagus, lateral aspect; 1b, lateral view of male genitalia with aedeagus removed.

2. Lateral view of head.

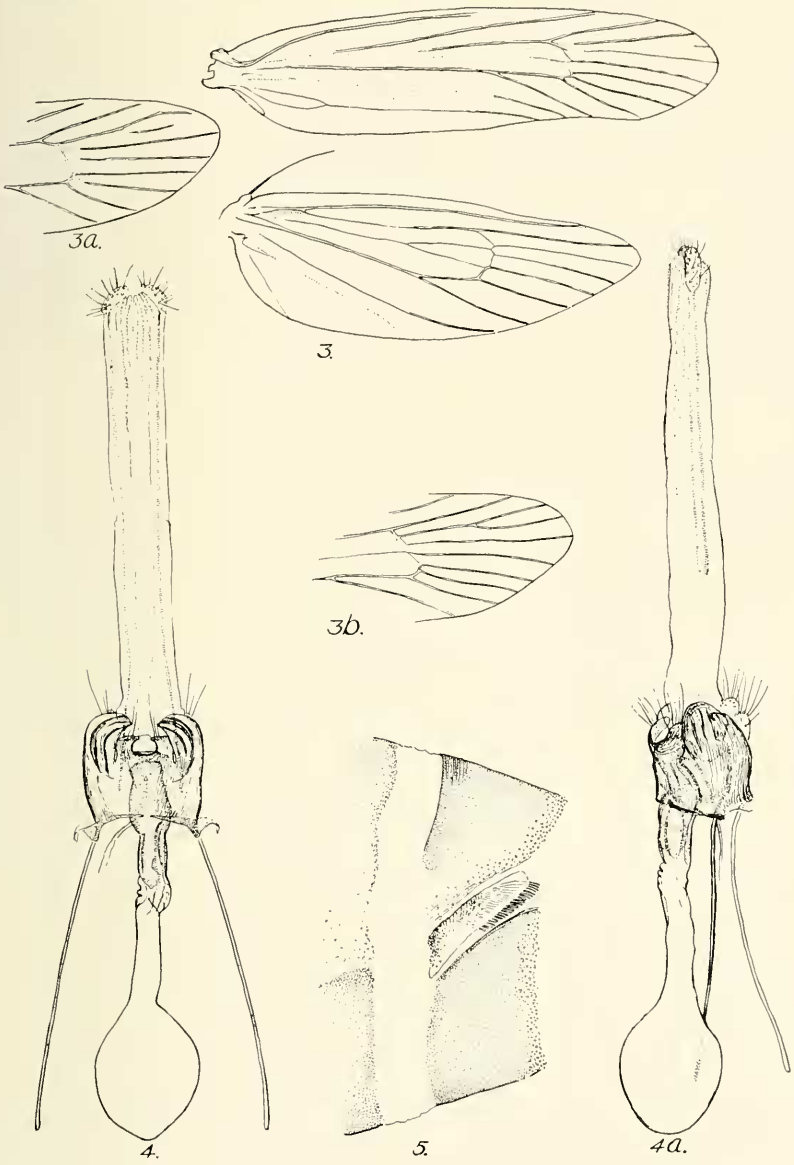

PLATE 22

Morophaga cryptophori

3-3b. Wing venation: 3, Venation of entire wings; 3a, 3b, apical halves of fore wings showing variation in veins 3 and 4 and 7, 8, and 9.

4-4a. Female genitalia: 4, ventral aspect; 4a, lateral aspect.

5. Eighth segment, lateral view, showing scale tuft.